

**SONY®**

# **TRINITRON® COLOR TV**

**(CABLE COMPATIBLE TV)**

## **OPERATING INSTRUCTIONS**

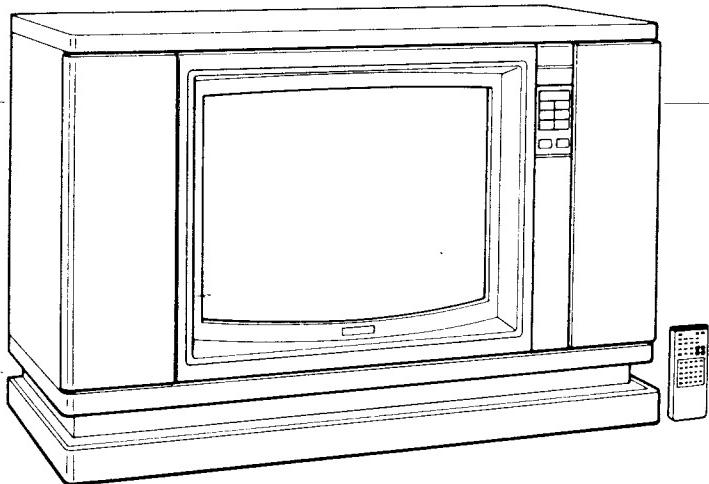
Welcome to the advanced world of Sony TV. For the best results and the utmost satisfaction from your new set, please read this manual thoroughly and retain it for future reference.

### **OWNER'S RECORD**

The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_

KU2680R



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## WARNING

To prevent fire or shock hazard, do not expose the set to rain or moisture.

Dangerously high voltages are present inside the set. Do not open the cabinet. Refer servicing to qualified personnel only.

### CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

## PRECAUTIONS

### Safety

- Operate the set only on 120 V AC.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified personnel before operating it any further.
- Unplug the set from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

### Installation

- To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the set in a hot or humid place or in a place subject to excessive dust or mechanical vibration.

### Cleaning

Clean the set with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the cabinet.

### Repacking

Retain the original carton and packing materials for safe transport of this set in the future.

Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

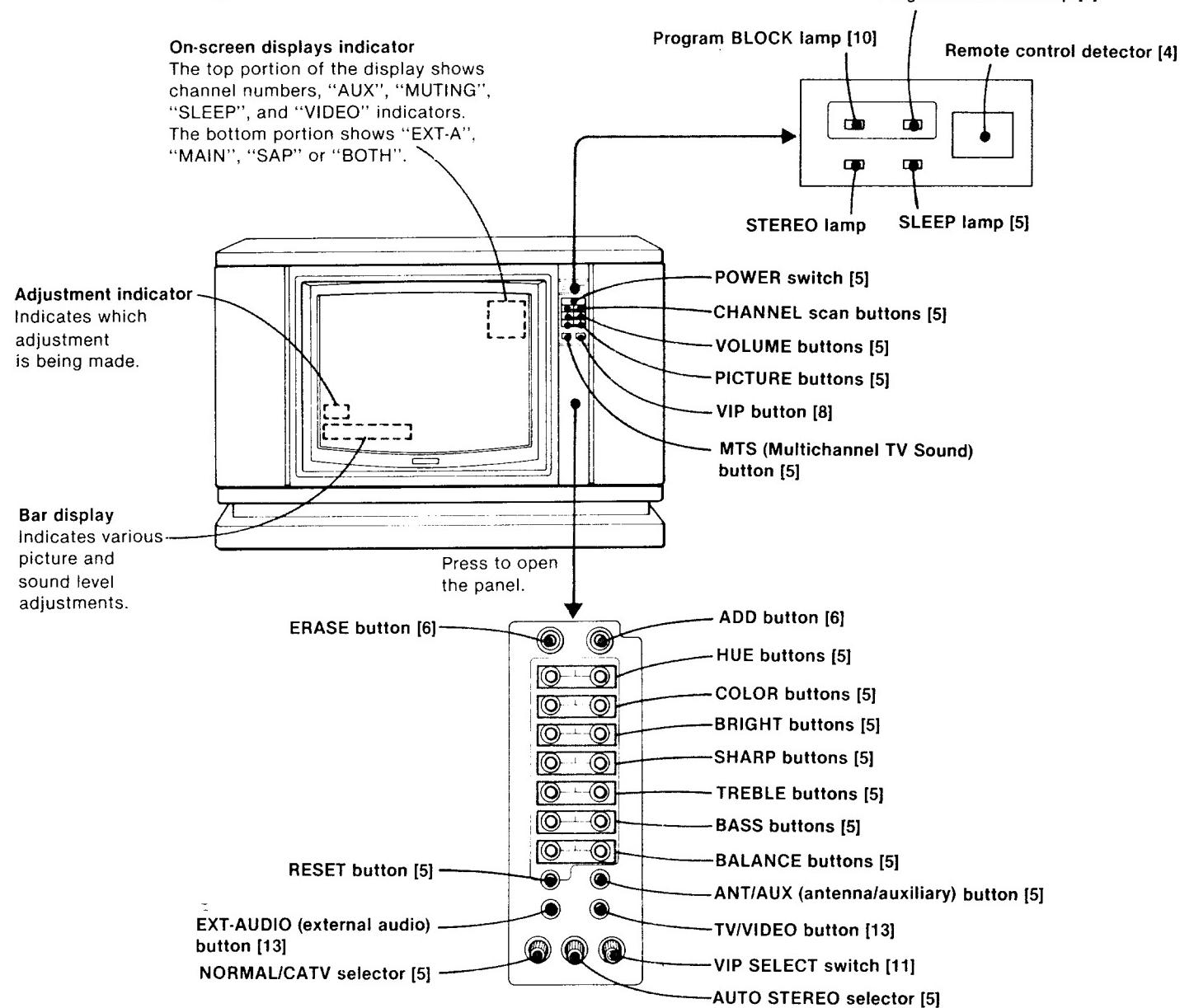
## FEATURES

- **Built-in stereo decoder** automatically decodes MTS (Multichannel TV Sound) broadcasts into left and right stereo or bilingual channels
- **Remote control Trinitron color television**
- **Multi-band VHF/UHF/CATV tuning**
- **VIP (Viewing Interval Programming) automatic timer and channel blocking feature**
- **Built-in stereo audio line inputs(L/R)** for listening to external audio sources via the built-in twin speakers.
- **Built-in video line input** for direct hook-up of a VCR or other video source
- **Sleep timer**, which automatically turns the set off after one hour
- **An extra auxiliary antenna terminal** designed for pay TV channels descrambled through a special converter (decoder) supplied by the cable TV company.
- **On-screen display**
- **DYNAMIC COLOR™ system** for superior color reproduction with natural facial color tones and dazzling whites
- **DYNAMIC PICTURE™ system**, which adjusts picture contrast automatically to produce more detail in both bright and dark areas of every scene
- **DYNAMIC FOCUS™**, which increases sharpness of the whole picture.
- **COLORPURE FILTER™**, which produces fine picture detail without color spill or color noise
- **VELOCITY MODULATION™** for sharpening image contours on the large screen.
- **ECONOQUICK™**, energy-saving, quick-start picture system

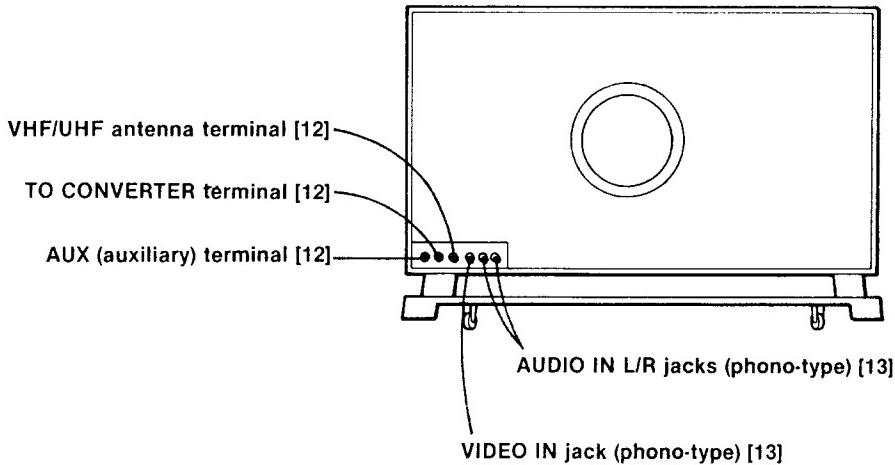
# LOCATION OF CONTROLS

For details on the use of each control, refer to the pages indicated in brackets.

## Front



## Rear



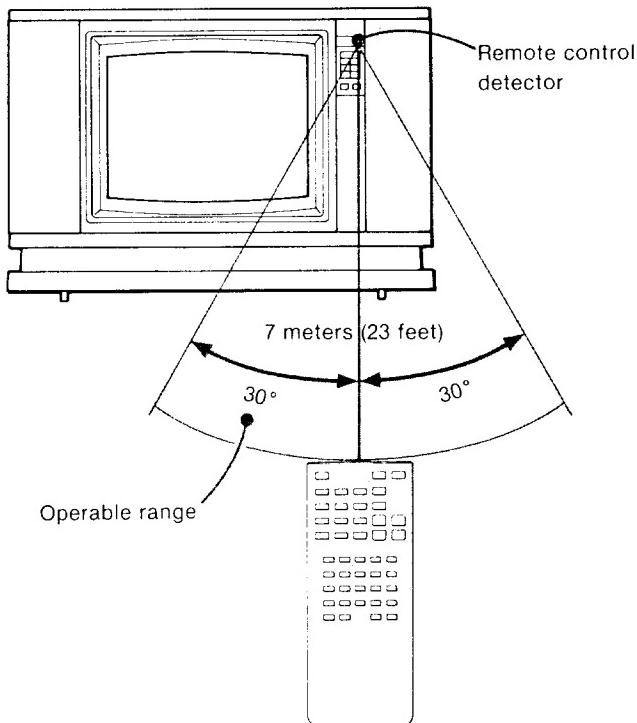
# SET-UP

## REMOTE COMMANDER

- 1 Turn the Remote Commander face down, press the tab and lift the cover.
- 2 Place batteries in the Commander with the polarities in the correct directions, as illustrated inside the case.
- 3 Replace the cover.

### Notes

- Use 2 size AA batteries (IEC designation R6).
- In normal operation, batteries will last up to half a year. If the set does not operate properly, the batteries might be exhausted. Replace all with new ones.
- To avoid damage from possible battery leakage, remove the batteries for extended unused periods.
- Be sure that there are no obstructions between the Commander and the TV.
- Operable range is limited.

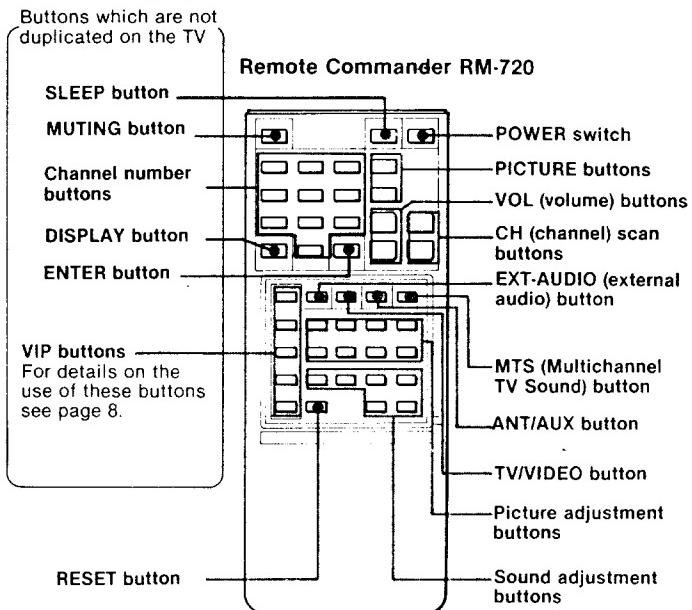


# OPERATION

## VIEWING TV PROGRAMS

This TV set is capable of receiving normal VHF and UHF broadcasts plus cable TV channels. (See "Cable TV channel chart" below.)

Usually the Remote Commander is all that is needed to operate the TV set in everyday use.



### Cable TV channel chart\*

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to this chart.

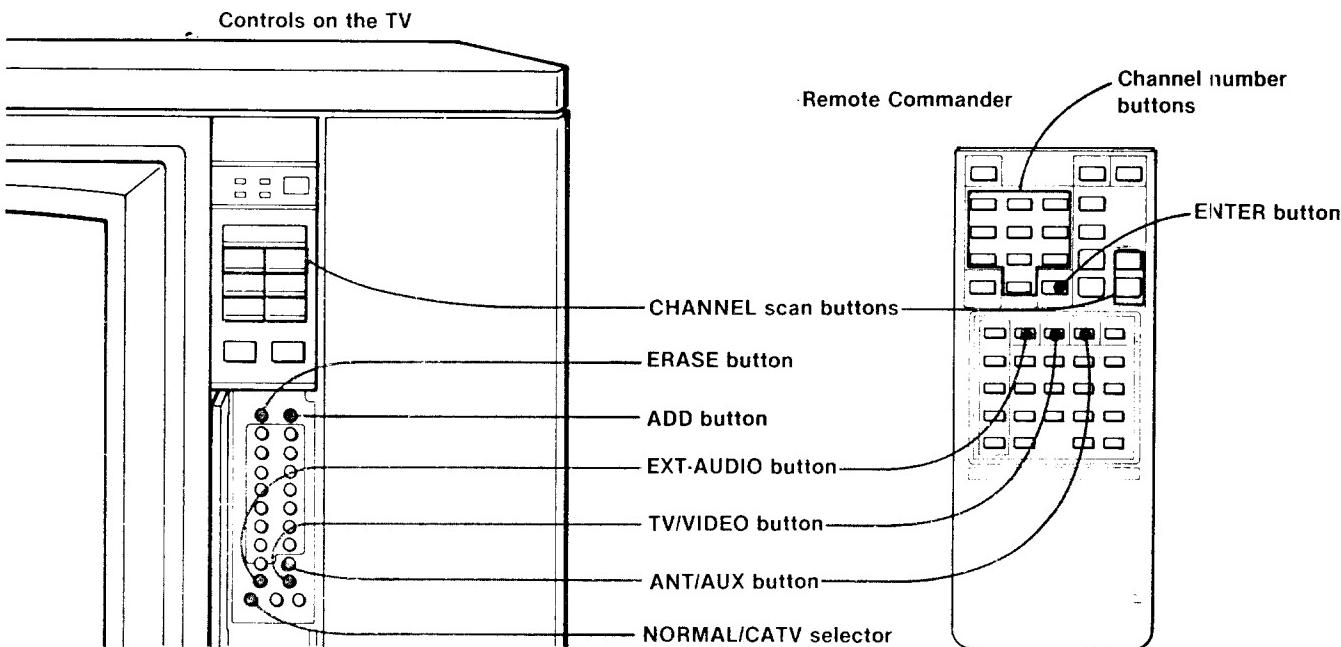
Number on this TV		1	5	6	14	15	16	17
Corresponding CATV channel		A-8	A-7	A-6	A	B	C	D
18	19	20	21	22	23	24	25	30
E	F	G	H	I	J	K	L	Q
31	32	33	34	35	36	37	38	94
R	S	T	U	V	W	W+1	W+2	W+3
95	96	97	98	99	100	101	102	125
A-5	A-4	A-3	A-2	A-1	W+59	W+60	W+61	W+82
								W+83 W+84

Check with your local cable TV company for more complete information on the available channels.

\*The designation of the cable TV channels conforms to the EIA/NCTA recommended standards.



# PRESETTING CHANNELS



Receivable channels of your set are:

VHF: 2-13

UHF: 14-69

CATV: 1-125

By adding and erasing channels, you can preset your TV so that only the desired channels appear in sequence when the CHANNEL +/- are pressed.

## PREPARATION

- 1 Turn on TV.
- 2 Make sure the following are properly set.
  - On-screen "VIDEO" indicator should be off.  
(Press TV/VIDEO button to change as necessary.)
  - On-screen "EXT-A" indicator should be off.  
(Press EXT-AUDIO button to change as necessary.)
- 3 According to the channel to be added or erased, check the following and make the necessary changes if any.
  - NORMAL/CATV selector  
For VHF and UHF channels, set to NORMAL  
For cable TV channels, set to CATV
  - On-screen "AUX" indicator  
(Press ANT/AUX button as necessary.)  
For VHF, UHF and regular cable TV channels:  
The indicator should be off.  
For pay cable TV channels:  
The indicator should be displayed.

## ADDING CHANNELS

- 1 Select the channel to be added by pressing the channel number buttons and then ENTER.
- 2 Press ADD.

A "+" indication will appear on the left of the channel display on the screen, indicating that the channel will appear in the proper numerical sequence when you press CHANNEL +/-.

Repeat steps 1 and 2 for other channels to be added.

## ERASING CHANNELS

- 1 Select the channel to be erased.
- 2 Press ERASE.

A "-" indication will appear on the left of the channel display on the screen, indicating that the channel has been erased. When CHANNEL +/- are pressed, you will see that the channel is skipped over in the numerical sequence.

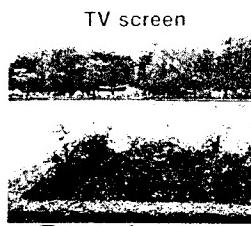
Repeat steps 1 and 2 for other channels to be erased. To add erased channels again, follow the steps in "ADDING CHANNELS".

### Note

You cannot erase a VHF or UHF channel from the memory and retain a cable TV channel which has the same number, or vice versa. If either a VHF/UHF channel or a cable TV channel with the same number is to be kept in the memory, do not erase the number.

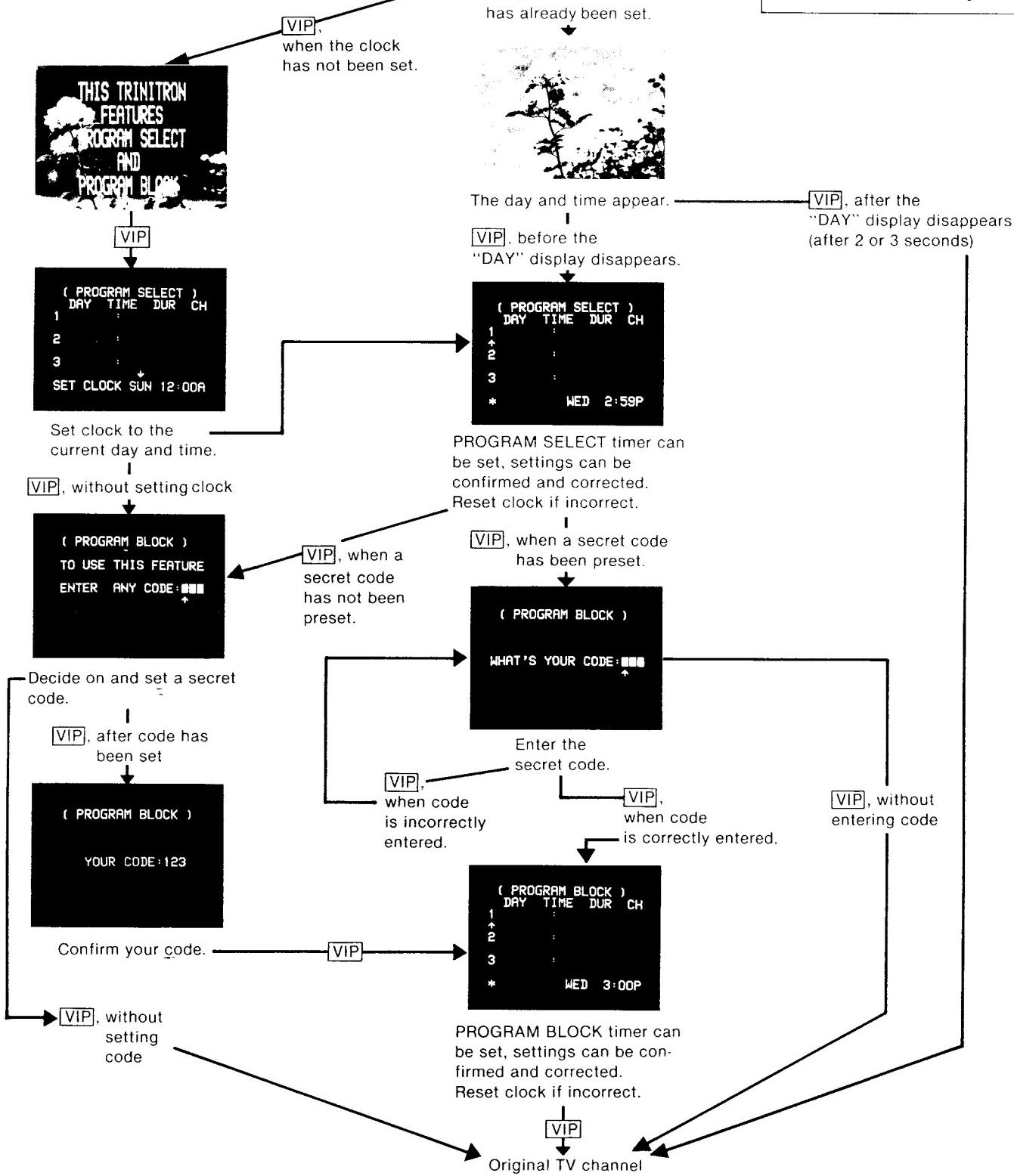
# THE VIP BUTTONS AND THE TIMERS

The screen of your TV set will change just as illustrated in this diagram as you follow the instructions using the 5 VIP buttons on your Remote Commander. (The **VIP** mark in the diagram indicates a press on the button.) Refer to this diagram when setting the internal clock and the two special timers of your TV.



Regular TV channel

The TV screen will return to displaying a regular TV channel whenever your TV set is turned off and then on again.



## THE CLOCK AND THE TIMERS

Once you set the **internal clock**, you will be able to display the current day and time on the screen with a press of the VIP button. It is essential also to set the clock correctly to work the two timers of your set.

The **PROGRAM SELECT** timer turns on your TV set automatically to the preselected channel at any preset time within the following 7 days and then turns it off after a preset duration. Up to 3 programs can be preset. Even if you are watching another channel, the preselected channel will turn on signaled by a beep sound.

The **PROGRAM BLOCK** timer automatically blocks out preselected channels at any preset time within the following 7 days for a preset duration. It is useful to prevent others, especially children, from viewing certain TV programs even when you are not at home. Up to 3 programs can be preset.

## FUNCTIONS OF THE 5 VIP BUTTONS

### VIP button

This button is used to display formatted "pages" of information that are used to set the PROGRAM SELECT and PROGRAM BLOCK timers.

### [+] [-] buttons\*

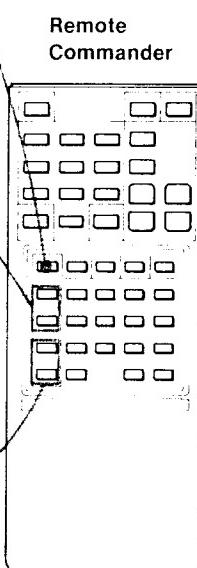
These buttons are used to move the screen cursor (arrow) to choose an item of information to be set. Press [+] to go on to the next item to be set. Press [-] to return to any previous item that you'd like to correct. Hold these buttons down to move the cursor rapidly.

### [+] [-] buttons\*

These buttons are used to advance (+) or reverse (-) the time, day, channel, turn-on or channel block duration, and other settings of the TV's internal timer.

Press once and release to advance one number or day at a time or hold the buttons down to advance rapidly.

\*The functions of these buttons are not available on the TV.



## OPERATION

A part of the diagram is explained here more in detail. After going through (or just by reading through) the following instructions on the basic preparatory steps, you will know how the various information is entered with the VIP buttons and what to do at different screen displays.

### Setting the clock

(Refer to the diagram on the previous page as you go on.)

#### 1 Turn on the TV.

#### 2 Press [VIP].

The message "THIS TRINITRON FEATURES PROGRAM SELECT AND PROGRAM BLOCK" will appear superimposed on the TV program you are watching.

#### 3 Press [VIP].

The PROGRAM SELECT chart with the message "SET CLOCK" will be displayed. The blinking "SUN 12:00 A" indicates that the clock has not been set yet.

#### 4 Set the current DAY, hour and minute, each with [+] or [-], then [ ] to move the cursor.

ex. \* WED 12:00A  
\* WED 3:00P  
\* WED 3:45P

Make sure A for A.M. (before noon) or P for P.M. (afternoon) are correctly set when setting the present hour.  
Upon releasing [+] or [-] for the last time, the clock will start.

The timers will not work properly unless the clock is set correctly.

#### 5 Press [ ].

The arrow will move to the upper left corner under the number 1. You are now ready to set the PROGRAM SELECT timer.

DAY	TIME	DUR	CH
1	:		
↑			

(If you do not desire to set the PROGRAM SELECT timer, go on to "Setting a secret code and the PROGRAM BLOCK timer".)

### Setting the PROGRAM SELECT timer

(....continued from "Setting the clock".)

Set the day, time, duration and channel for which you desire the timer to activate.

#### Notice

- The PROGRAM SELECT timer will not work if the VIP SELECT switch on the TV is set to OFF. If you want the timer to activate, make sure that it is set to ON.
  - Pay cable TV programs cannot be preset together with other VHF/UHF or cable TV channels.
- If you desire the timer to work for pay cable TV programs, press ANT/AUX button after the settings are completed so that the "AUX" indicator is displayed when the screen is returned to displaying regular TV channels again.

(Suppose you desire channel 5 to turn on at 5:35 P.M. next Wednesday and then turn off after 2 hours.)

#### 1 Press

The cursor will move to the DAY setting position.

	DAY	TIME	DUR	CH
1	:			



#### 2 Set the DAY with or

	DAY	TIME	DUR	CH
1	WED	:		



Day indicators change as follows:

SUN → MON → TUE.....SAT → M-F\* → S-S\* → "blank"\*\*  
back to SUN ←

\*M-F: for the timer to activate at and for the same time Mondays through Fridays

S-S: for the timer to activate at and for the same time everyday  
"blank": erases all the settings of the same row

#### 3 Press

The cursor will move to the hour setting position.

#### 4 Set the hour with or

	DAY	TIME	DUR	CH
1	WED	5:	P	



Make sure A for A.M. (before noon) or P for P.M. (afternoon) is correctly set.

#### 5 Press

The cursor will move to the minute setting position.

#### 6 Set the minute with or

	DAY	TIME	DUR	CH
1	WED	5:35P		



#### 7 Press

The cursor will move to the DURATION setting position.

#### 8 Set the duration with or

The duration is set by the hour. Set as many hours as you desire the program to be. Up to 9 hours can be set.

	DAY	TIME	DUR	CH
1	WED	5:35P	2HR	



#### 9 Press

The cursor will move to the CHANNEL setting position.

#### 10 Set the channel with or

	DAY	TIME	DUR	CH
1	WED	5:35P	2HR	5



#### 11 Press

The arrow will move to the leftmost item of the next row and you will hear a "beep" to indicate that all the necessary information has been set properly.

	DAY	TIME	DUR	CH
1	WED	5:35P	2HR	5

beep

2



If you find that the present DAY and time display is incorrect, move the cursor and make the correction(s).

As long as all the necessary information is preset, the cursor can be left anywhere on the screen.

To set other programs or channels, repeat steps 1-11 for the 2nd and/or 3rd row on the chart.

At the preset time and day, the timer will operate. The **program SELECT lamp** on the TV will be lit until all the "SELECT" programs are activated.

Go on to the following "Setting a secret code and the PROGRAM BLOCK timer"

### Setting a secret code and the PROGRAM BLOCK timer

(....continued from "Setting the PROGRAM SELECT timer" or "Setting the clock")

To allow only you to block out TV programs and release the block as desired later on, you will need a secret code of your own. Decide upon a 3-digit number that you will remember and set the code into the timer by following the steps below. Only you and those who know this code number will be able to make the PROGRAM BLOCK timer-chart appear on the screen.

#### NOTICE

Be sure to decide on the number **at this moment**. Should you decide to change the number after going through the procedure below, you will have to erase all the clock settings and programmed numbers from the memory. For details, see "FORGOTTEN CODE/CHANGING CODE" on page 11.

**1 Press [VIP].**

The message "TO USE THIS FEATURE ENTER ANY CODE" will appear.

**2 Set all 3 digits of the number chosen, using the [+] or [-] buttons and the [ $\rightarrow$ ] or [ $\leftarrow$ ] buttons.**

ex. 1■■ 19■ 198  
 ↑      ↑      ↑

**NOTE**

We recommend that you leave the cursor under the third digit and do not press [ $\rightarrow$ ] or [ $\leftarrow$ ] after all three digits are set. If you press [ $\rightarrow$ ] after setting the rightmost digit or [ $\leftarrow$ ] after setting the leftmost digit, the number will be memorized right away and you will automatically be at the next screen display in step 3.

**3 Having made sure you have set the code you want, press [VIP].**

ex. YOUR CODE: 198  
 ↑

If your code has been properly set, it will be displayed. (If you had left a digit or more unset, the numbers will return to ■■■ instead. If so, return to step 2 again.)

**4 Press [VIP].**

The PROGRAM BLOCK timer chart will appear and you are ready to set the timer.

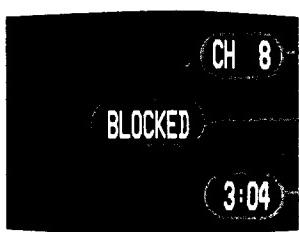
(If you do not desire to set the PROGRAM BLOCK timer, go on to step 6.)

**5 Set the day, time, duration and channel for which you desire the timer to block out the TV program referring to steps 1-10 of "Setting the PROGRAM SELECT timer". (The presetting procedure of the two timers are the same.)**

Only for the PROGRAM BLOCK timer, the number "24" will appear after "9" when setting the duration. This is for blocking out the preset channel all day long for the preset day or days.

**6 Turn off TV, or if desired, return to watching normal TV channels by pressing [VIP] once.**

The program BLOCK lamp on the TV will be lit until all the "BLOCK" programs are activated.



channel that is blocked

blinks

present time

If the set is turned on and the blocked channel chosen during a preset blocked period, the above display will appear and sound is muted completely.

**After the preset program is over**

The settings of a program, when that particular program is over, will be erased automatically. Only, the preset information for those programs set for M-F (Mondays through Fridays) and S-S (everyday) will be retained in the memory until you cancel the program.

**WHAT HAPPENS IF....**

What happens if...	Answer
● two or more programs on the PROGRAM SELECT timer are set to turn on at the same time?	The timer selects the programs on the chart in numerical order.
● the PROGRAM SELECT timer and BLOCK timer are set for the same time and channel?	The screen with the message "BLOCKED" will automatically turn on and then turn off at the time preset by the PROGRAM SELECT timer.
● you have changed the screen with the VIP button without completing a setting?	The item that has been set will be retained and you can complete programming the timer when you return to the chart again.
● the time set for two or more programs on the PROGRAM SELECT timer overlap?	The program set for the earlier time will be turned on until the next program starts. The next program always takes precedence and will turn on as preset. The automatic turn-off of the earlier programs will be cancelled.
● you turn off the TV, or change the channel before a PROGRAM SELECT program that has turned on turns off by itself?	The automatic turn-off of that particular program will be cancelled and will not activate even if you turn on that program again.
● a channel that was supposed to turn on automatically had been turned on already?	The channel will be turned off automatically at the preset time.
● you are displaying a timer chart on the screen at an automatic turn-on or block-out time?	The automatic turn-on will not occur and the screen will remain at the displayed timer chart. However, you will be at the preset channel when you return the screen to the regular channel with [VIP], and the automatic turn-off will occur. The channel that was preset to be blocked out will be blocked when the channel is selected.
● you have set a timer without setting the clock?	The timers will not work properly.
● a setting of a PROGRAM SELECT timer overlaps with that of the SLEEP timer?	The TV will turn off at whichever turn-off time is earlier.

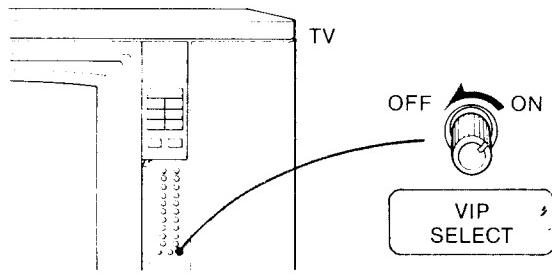
#### If a power interruption occurs?

A short power interruption will not affect the memory of the timers. All you have to do is to reset the clock if it is showing the wrong time when the power is turned on again.

If the interruption is a long one (longer than approx. 2 hours), everything that was programmed into your set's memory will be erased. When you press the VIP button in order to display the time, the message "THIS TRINITRON FEATURES..." will appear. In this case, you must set the clock, enter your secret code, and if desired, set the timers again.

#### CANCELLATIONS

**To cancel out the PROGRAM SELECT timer for the time being only**  
Sometimes you may wish to cancel the PROGRAM SELECT settings for only a certain amount of time as when you will be away on a trip or in order to watch something else. By using the VIP SELECT switch on your TV set, you can temporarily cancel out the timer without having to re-program the timer again later. It will be useful especially when you have set the timer to activate Mondays through Fridays or for everyday.



Turn VIP SELECT to OFF. As long as it is OFF, the PROGRAM SELECT lamp on the TV will be off and the TV will not turn on or off automatically as preset.

When this switch is turned ON again, the timer will work as previously set.

#### To cancel out the PROGRAM BLOCK timer for the time being only

- 1 Display the PROGRAM BLOCK chart.
- 2 Press and hold  $\square$  or  $\square$  until the arrow points to the DAY segment of the desired program.

DAY	TIME	DUR	CH
1 TUE	3:15A	3HR	10

↑

3 Press and hold  $\square$  or  $\square$  until nothing appears for the DAY segment. (See 2 of **Setting the PROGRAM SELECT timer** on page 9.) All the numbers set for that program will disappear at the same time.

4 Press **VIP** once and select the channel that was blocked out. The program will appear.

5 When you are through watching the program, display PROGRAM BLOCK chart again.

6 Press  $\square$  or  $\square$  until the arrow points to the "blank" DAY segment of the row that was erased in step 3.

ex. 

DAY	TIME	DUR	CH
1			

↑

7 Press  $\square$  or  $\square$  button to again set the originally preset DAY or DAYS.

ex. 

DAY	TIME	DUR	CH
1 TUE	3:15A	3HR	10

↑

The original time and channel set for that particular program will appear at the same time without your repeating the entire presetting procedure.

8 Turn off the TV or if desired, return to regular TV channels. The channel will be blocked out as preset originally.

#### To cancel a setting completely

- 1 Display the PROGRAM SELECT or BLOCK chart on which a cancellation is to be made.
- 2 Press  $\square$  or  $\square$  until the cursor points to the DAY segment of the program you'd like to cancel.
- 3 Press + or - until nothing appears. (See 2 of "**Setting the PROGRAM SELECT timer**" on page 9.)  
The settings on that particular row will disappear at the same time and the program will be cancelled.

#### FORGOTTEN CODE/CHANGING CODE

If you have forgotten or if you need to change your secret code, there is no way but to unplug the TV set and erase everything that you have already set. You must then repeat the whole process of starting the clock and entering a code again.

If not more than approx. 30 minutes have passed since you have plugged the set,  
turn off the TV and unplug the TV set from the power outlet. Everything will be erased immediately because the settings are not fixed in the memory of the TV yet. Plug the set in again and repeat the presetting procedures on pages 8-10.

If more than approx. 30 minutes have passed since you have plugged the set,  
your TV set has to be left unplugged for 2 hours to erase its memory. Then plug in the set and repeat the presetting procedures on pages 8-10 again.

# ANTENNA/CABLE CONNECTION

If your local broadcast signals are strong, an indoor antenna may be sufficient to obtain a clear picture.

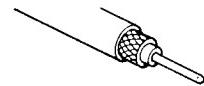
If you cannot obtain satisfactory reception with an indoor antenna, using an outdoor antenna may be necessary. Cable TV reception is only possible by connecting a cable supplied by your local cable operator.

Prepare the antenna or cable end using the appropriate connector, and connect the antenna or cable to the antenna terminal of the TV. (See A, B or C below.)

## A Combination VHF/UHF antenna\*, VHF antenna, UHF antenna or CATV cable

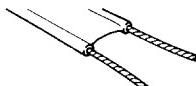
Select the proper connector according to the cable type.

### When the cable is a 75-ohm coaxial type (round)



Use an optional F-type connector.

### When the cable is a 300-ohm ribbon type lead-in (flat)

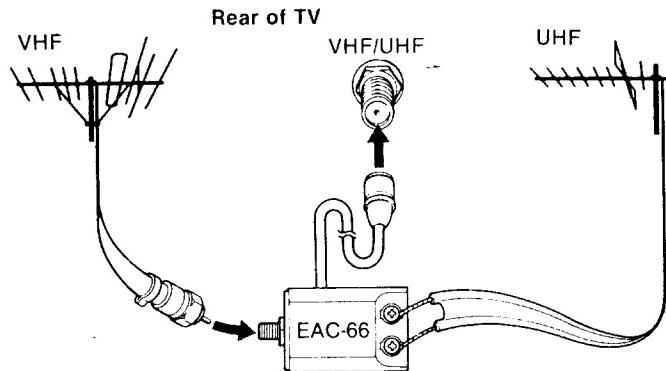


Attach the supplied antenna connector.

## B When both VHF and UHF antennas are connected

Prepare the VHF antenna end using the appropriate connector as illustrated in A.

Attach an optional EAC-66 U/V mixer to the TV antenna terminal, and connect the cables to the U/V mixer.

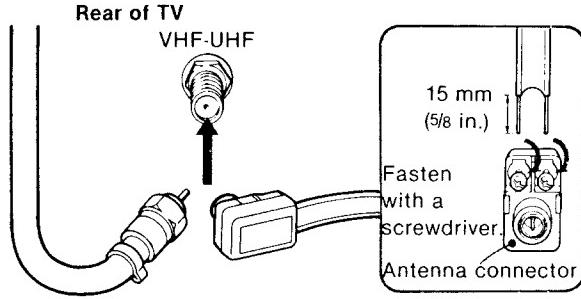


When the cable is connected to the TV with the U/V mixer, snow and noise may appear in the pictures of the cable TV channels over 37 (W+1).

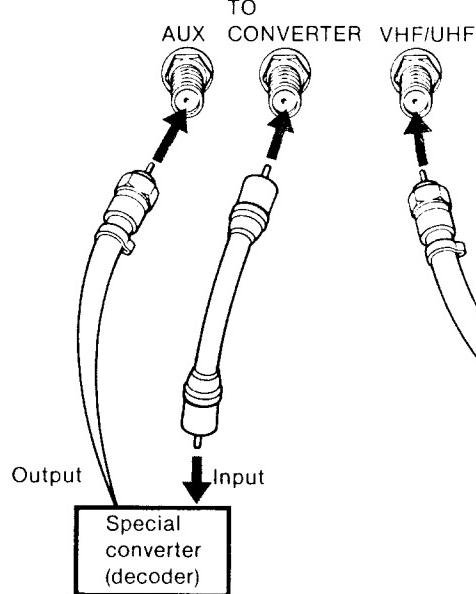
## C Cable with a special converter (decoder)

Pay cable TV systems use scrambled or encoded signals and require special converters (decoders)\* in addition to the normal cable connection. Connect the converter (decoder) with a 75-ohm coaxial cable (optional).

### Rear of TV



\* Most combination antennas are equipped with a signal splitter. Take off the splitter and attach the proper connector.

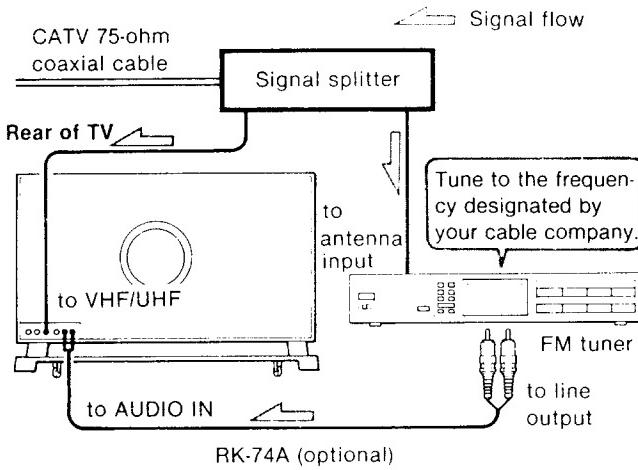


\* The special converter (decoder) will be supplied by the cable company.

# APPLICATIONS WITH OTHER OPTIONAL EQUIPMENT

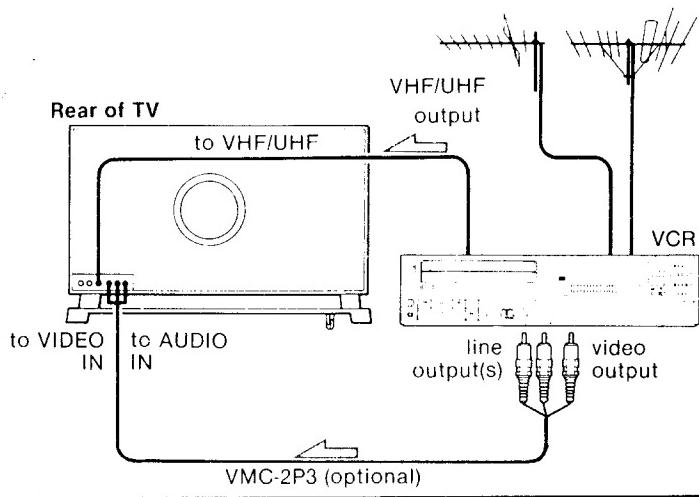
## VIEWING FM SIMULCASTED PROGRAMS ON CABLE TV

By connecting an FM stereo tuner to the AUDIO IN jacks in addition to the usual CATV cable connection, you can enjoy certain cable TV programs with stereo sound, such as MTV(music television), whose stereo audio signals are sent over the cable on certain FM frequencies. The incoming cable signal is split by an optional signal splitter and fed to both the TV tuner(for picture) and an FM tuner(for sound).



## VIEWING VCR PLAYBACK

You can achieve better picture and sound quality by connecting a VCR to your TV using the direct audio L/R and video jacks rather than using an RF connection to the antenna terminal. With this connection, you don't have to select channel 3 or 4 to view VCR playback.



### Preparation

Press TV/VIDEO button until the on-screen "VIDEO" indicator is displayed. (When the "VIDEO" indicator is on the screen, the sound is always switched to the signal fed in through the AUDIO IN jacks.)

For operation, refer to the instruction manual furnished with the recorder.

### When the VCR used is only equipped with one monaural audio output jack

Connect the audio output of the VCR to the AUDIO IN L jack and the sound will be heard through both speakers. If it is connected to the AUDIO IN R jack, the sound will only be heard from the right speaker.

### Preparation

Make sure the following are properly set.

- On-screen "VIDEO" indicator should be off.  
(Press TV/VIDEO button change as necessary.)
- On-screen "EXT-A" indicator should be displayed.  
(Press EXT-AUDIO button to change as necessary.)
- NORMAL/CATV selector should be set to CATV.  
Depending on the channel to be viewed, check the following and change as necessary.
- On-screen "AUX" indicator  
(Press ANT/AUX button to change as necessary.)
  - For regular cable TV channels:  
The indicator should be off.
  - For pay cable TV channels:  
The indicator should be displayed.

Operate the TV the same as in usual TV viewing.

# SPECIFICATIONS

Television system	American TV standards
Channel coverage	VHF: 2-13 UHF: 14-69 Cable TV: 1-125
Picture tube	Trinitron tube <b>26-inch picture measured diagonally</b>
	28-inch picture tube measured diagonally
Inputs	Audio inputs (2) phono jack, 408 m Vrms (100% modulation), more than 47 k ohms
	Video input (1) phono jack, 1 V p-p, 75 ohms, unbalanced, sync negative
Power requirements	120 V AC, 60 Hz
Power consumption	160 W (max.) 8.5 W (in standby condition)
Accessories supplied	Remote Commander RM-720 with 2 size AA batteries Antenna connector U/V mixer EAC-66

Design and specifications are subject to change without notice.

# TROUBLESHOOTING

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed below.

SYMPTOM		CHECK AND ADJUST
<b>GENERAL</b>	Poor or no picture (screen not lit), good sound	<ul style="list-style-type: none"> <li>• Adjust PICTURE.</li> <li>• Adjust BRIGHT.</li> <li>• Check antenna/cable connections.</li> </ul>
	Good picture, no sound	<ul style="list-style-type: none"> <li>• Press VOLUME+.</li> <li>• Release MUTING on the Remote Commander.</li> <li>• Check that the EXT-AUDIO button is set correctly.</li> <li>• Check that the MTS-button is set correctly.</li> </ul>
	No picture (screen not lit), no sound	<ul style="list-style-type: none"> <li>• Is POWER switched on? Power in outlet?</li> <li>• Check that the TV/VIDEO button is set correctly.</li> </ul>
	No color	Is it a color program?
	Snow and noise only	<ul style="list-style-type: none"> <li>• Is it an active or the correct channel?</li> <li>• Check the NORMAL/CATV selector setting.</li> <li>• Check that the ANT/AUX button is set correctly.</li> <li>• Check antenna connections.</li> </ul>
		This is often caused by local interference. (ex. cars, neon signs, hair-dryers etc.) Adjust antenna for minimum interference.
<b>THE VIP TIMERS</b>		Reflections from nearby mountains or buildings often cause this problem. A highly directional outdoor antenna or CATV cable may improve the picture.
	Try another channel. It could be station trouble.	
	PROGRAM SELECT timer does not work properly.	<ul style="list-style-type: none"> <li>• Check the VIP SELECT switch on the TV set. The timer will not work if it is OFF.</li> <li>• Is the clock set correctly?</li> <li>• Are all items of information on the timer-chart properly set?</li> </ul>
	Automatic turn-off did not occur.	Once the TV is turned off manually or the channel is changed after automatic turn-on, the turn-off will be cancelled.
	Automatic turn-off occurred too early.	The SLEEP timer may have been set.
	PROGRAM BLOCK timer does not work properly.	<ul style="list-style-type: none"> <li>• Is the clock set correctly?</li> <li>• Are all items of information on the timer-chart properly set?</li> </ul>

If the problem still cannot be solved, contact your nearest service facility.